A NEW THAIS FOUND ON A LOG AT PORT STEPHENS

By Gertrude Thornley

One sunny day towards the end of August, 1950, Mrs. Jackson and I paused to rest after collecting at Hawkesnest Beach on the northern side of the port. Hawkesnest is a double beach, inner and outer, shaped like a "V," the two beaches separated by sandhills, but converging at the point to a sandspit which connects it with the mountainous Yacoaba, which towers over the entrance. We had the sea on one side, the bay on the other.

Nearby was a log, covered with barnacles, and there I saw a Thais shell that was new to me. We searched carefully and found several more each, and a few weeks later I found seven more adults and several sub-adult.

With it were *Mytilus obscurus* Dunk. and a new Agnewia, which is more ventricose than *Agnewia tritoniformis* (Blain). It is of a deep bluish tinge throughout, marked with splashes of brown, and the ribbing is more widely spaced. It is also smoother than *tritoniformis*.

My first problem was to determine, if possible, the habitat of the new *Thais*. A floating log might have come from anywhere. No similar *Thais* could be found in the bay or along the foreshores. The shell it most resembles is *Dicathais scalaris* (Menke), found in New Zealand. It is certainly very different in appearance to our common cartrut shell, *Dicathais orbita* (Gmelin). This log might have drifted even from New Zealand, as both the other shells are generically or specifically represented there. So I first obtained from Mr. Powell specimens of *Neothais smithii*, and from Mr. Brookes specimens of some rarer forms of *Dicathais scalaris* (Menke), examination of which proved that this shell could be neither of these species. I must thank these gentlemen for their kindly assistance.

The barnacles proved to be a common variety found in all tropical and subtropical waters. Miss Pope, of the Australian Museum, was very interested in the problem, and helped me to identify it.

I then sent samples of the wood to the Forestry Commission, who informed me that it was scrub beefwood, sometimes referred to as silky oak. "Its distribution is from Milton on the South Coast of N.S.W. to Southern Queensland."

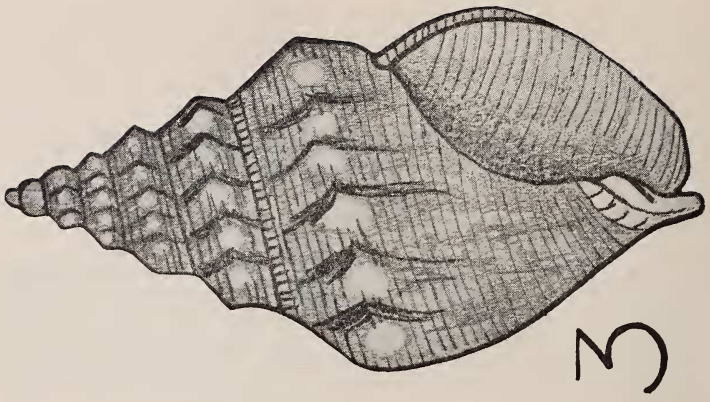
A few weeks before record floods had carried many logs to sea from all the river mouths of Northern N.S.W. Fishermen told me that for weeks the sea was full of them, all drifting south on the Notonectian current. Since the barnacles and shells on this log were only just dead, it seems to me to be fairly well established that it came south during these floods from some location on the mid-north coast of N.S.W.

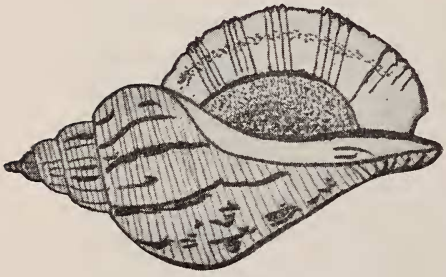
So our new Thais went to sea like a stowaway riding on a log for his ship. Therefore, I am going to call the species *"vector,"* meaning "one who is carried," or "a passenger." His little companion may be called *Agnewia nautica,* the sailor.

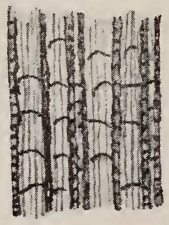
The type description is as follows:—

Genus DICATHAIS Iredale, 1936

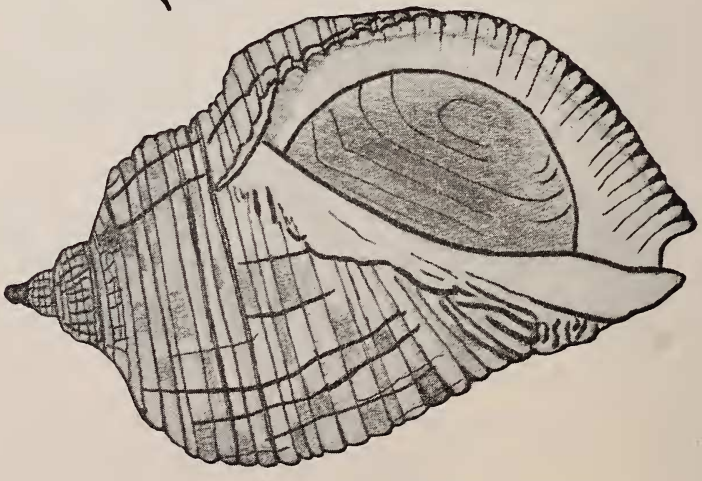
DICATHAIS VECTOR, sp. nov.







1a



1. Dicathais vector, sp. nov.
2. Agnewia nautica, sp. nov.
3. Cominella eburnea Reeve.

Delin. Gertrude Thornley.

Shell ovate, ventricose, protoconch pale horn colour, of 3 whorls; four other whorls in the adult, somewhat shouldered, with small oblique lamellae at the sutures, which are closely conjoined; flat superficial ribs throughout on the body whorl. At the top they occur in groups of three, a wide rib, then a less wide, then a narrow rib; about half-way down they alternate wide and narrwo in pairs. The interstices are somewhat punctate. With a lens it is possible to see fine revolving striae on each rib. These ribs are crossed by growth lines, giving a somewhat cancellate appearance to the apical whorls. The aperture is wide, of a pale brownish white. Young specimens show brown radiating lines; adults have brown in the interstices at the edge only. Columella white; the shell being a drab light brown with dull brown irregular maculations. The upper whorls are bluish in colour.

This shell cannot be confused with *D. textiliosa* (Lam.) (a form of which seems also to occur in N.S.W.), though they are related species, but it resembles more closely the smooth form of *bicostalis* Lam., illustrated by Tryon, pl. 50, fig. 91. It is fairly similar to *D. scalaris* (Menke), of New Zealand, which may perhaps be its closest relation, though this shell seems also to have some affinities with the more tropical Indo-Pacific forms, such as *D. bicostalis* and *D. persica.*

This paper may serve to show how, in the pursuit of knowledge, the shell collector must often turn detective. The story of this shell is rather an unusual and fascinating one and still further work remains to be done before the mystery of its origin is fully solved. I must thank all the people who helped me with this somewhat unusual problem, Mrs. Jackson, Miss Pope, Miss Allan, who allowed me to compare the shells with those in the Australian Museum collections. Mr. Powell and Mr. Brookes, who so kindly forwarded me shells for comparison, and the Forestry Commission, who identified the wood for me.

The type specimens have been donated to the Australian Museum, and specimens also to the Royal Zoological Society.

Bibliography

Cotton and Godfrey, South Australian Shells, "South Australian Naturalist," vol. xiii, No. 4, p. 142.

Iredale, Results from Roy Bell's Molluscan Collections, Proc. Linn. Soc., N.S.W., vol. xlix, pt. 3, 1924, p. 273.

Australian Molluscan Notes, No. 2, Rec. Aust. Museum, vol. xix, No. 5, 1936, p. 325.

Menke, Verz. Conch. Samml. Mals., 1929, p. 33.

Tryon, Manual of Conchology, vol. 2, pl. 50, fig. 91.

COMINELLA EBURNEA Reeve

By R. Swan

A specimen was found on the 8th January, 1951, on the sandflat to the east of the bridge crossing the Wagonga Inlet, Narooma. It was crawling on open sand between oyster beds, below low water. Search failed to locate more than the one specimen, but in May several *Cominella lineolata* were found in a dead state, and one more *C. eburnea.*

I believe this to be the first specimen of *C. eburnea* to be found in N.S.W.